The challenge of citizen participation to democracy

Biegelbauer, Peter; Loeber, Anne

Veröffentlichungsversion / Published Version
Arbeitspapier / working paper

94

Reihe Soziologie

Sociological Series

The Challenge of Citizen Participation to Democracy

Peter Biegelbauer

Anne Loeber

94

Reihe Soziologie

Sociological Series

The Challenge of Citizen Participation to Democracy

Peter Biegelbauer

Anne Loeber

April 2010

Institut für Höhere Studien (IHS), Wien
Institute for Advanced Studies, Vienna

Contact:

Dr. Peter Biegelbauer
☎: +43-1-599-91-170
email: beagle@ihs.ac.at

The project “Impact of Citizen Participation on Decision-Making in a Knowledge Intensive Policy Field” (CIT-PART), Contract Number: SSH-CT-2008-225327, is funded by the European Commission within the 7th Framework Programme for Research – Socioeconomic Sciences and Humanities. We would like to thank the Commission for its contribution. The project runs from 2009 to 2011. For more details see: www.cit-part.at

Abstract

The paper starts from the observation that the forms of citizen participation have changed considerably from what could be observed in the 1950s and 1960s. Election turn-outs are falling, grass-roots activities of citizens are on the rise and political commentaries in different forms are proliferating on the Internet.

How can we conceptualise modern democratic systems and forms of participation? How helpful is democracy theory for this endeavour? The paper revisits classic and post-modern models of democracy and makes an effort to conceptualise and classify modern practices of citizen participation on the basis of categories derived from democracy theory.

Democracy theory should also be of help in providing an answer to the question of how democratic instruments of interactive governance actually are. Criteria for the evaluation of these instruments and their impact on policy-making will be derived from theorizing on democracy and some proposals will be made for an operationalisation of these criteria.

Keywords

Democracy theory, citizen participation, deliberative policy instruments, impact on policy-making.

Contents

1 Introduction

The ways lay citizens participate in the political life of modern pluralist democratic systems have changed greatly from what could be observed during the golden era of the Welfare State, the 1950s and 1960s. Election turn-outs are in general falling, grass-roots activities of citizens are on the rise and political commentaries in different forms are sprouting on the Internet.

Political systems have – often *nolens volens* - reacted to the demands of citizens and have institutionalised changes in political processes by building councils, panels and advisory boards, constructing deliberation and planning instruments of different sorts and in general have become more responsive towards the public.

How can we conceptualise modern democratic systems and forms of participation? How helpful is democracy theory for this endeavour? This paper revisits classic and post-modern models of democracy and makes an effort to conceptualise and classify modern practices of citizen participation on the basis of categories derived from democracy theory.

Democracy theory should also be of help in providing an answer to the question of how democratic instruments of interactive governance actually are. The case study being discussed here is participatory technology assessment (PTA), a policy tool which promises an involvement of the public in decision-finding procedures on divisive issues in science and technology. Examples for such topics are the production of genetically modified organisms, human embryonic stem cell research and xenotransplantation, the transplantation of organs of mammals into humans. Criteria for the evaluation of PTA and its impact on policy-making will be derived from theorizing on democracy and some proposals will be made for an operationalisation of these criteria.

The research for this paper is part of the EU-FP 7 project *Impact of Citizen Participation on Decision-Making in a Knowledge Intensive Policy Field* (CIT-PART), which is active from 2009-2011 and coordinated by the Institute for Advanced Studies (IHS). In the framework of CIT-PART the impact of (participatory) technology assessment exercises on the regulation of xenotransplantation is studied comparatively in Austria, Canada, Denmark, Italy, Latvia, the Netherlands, Sweden, UK, the European Commission, the OECD and the Holy See. [1]

In what follows this paper discusses recent changes affecting democracies, provides an analysis of democracy theory, on the basis of which models are drafted, typologies of democracies discussed and instruments of democratic participation identified. Existing

[1] We would like to thank Erich Griessler for critical comments, Daniel Lehner for library work and Janus Hansen for providing his doctoral thesis and literature.

research on the evaluation of democracies and the policy instruments technology assessment (TA) and participatory technology assessment (PTA) will be reviewed in order to provide a classification of TA and PTA procedures and provide suggestions for an evaluation of these policy instruments .

The discussion of democracy theory and concepts of democracy lies at the very heart of this paper, since the respective notion of democracy chosen for such an exercise reflects on the efforts to classify and evaluate democracies and policy instruments alike.

A question crucial for the evaluation of a policy instrument is the focus of the last part of the paper: what does it mean that TA or PTA have an effect of some sorts on the policy-making process and its outcome, the policy itself. The issue is important indeed and it will be dealt with here by first scrutinising the meaning of the term *impact*. This will be followed by some considerations of how we are to establish whether some observable phenomenon is *caused* or *co-shaped* by TA or PTA.

2 Democracy Changing

Over the last years there has been an intense debate about modern democracies crumbling under pressures from both within and outside the democratic system. At first glance, this is not surprising. Democratic regimes have a history of being constantly challenged: the 19th and early 20th century witnessed the struggle for the right to vote, the (sometimes hot, at other times cold) wars fuelled by antagonistic ideologies as well as the fight over the depth and width of re-interpreting 'suffrage' by what came to be known as the new social movements in the 1960s, 70s and early 80s.

With the end of the Cold War, there was no hindrance left to the process of globalisation that had begun with such events as the establishment of the United Nations and the General Agreement on Tariffs and Trade (GATT) in 1945 and in 1947 respectively. Thus the famous "peace dividend", George Bush sr.'s idea of reducing defence spending and utilising the surplus money for other purposes, was realised in the form of steady growth rates of the globalising world economy. Yet the same neoliberal policies that were one of the manyfold reasons for the end of the Cold War caused the widening gap between the income of different layers of society in the OECD countries. These changes in the international political economy and other phenomena of globalisation that occurred since have been interpreted differently (Fukuyama 1992, Ohmae 1995, Hirst/Thompson 1996, Dicken 1998, Jessop 1999).

What were the implications of these dynamics for the democracies involved? The literature lists several effects. Crouch (2004) draws a link between the changes in the international political economy and the developments in democratic systems in the 1990s and 2000s. He posits that public confidence in politics, and in view of the current world economic crisis also in the economy and its representatives, has strongly diminished (Crouch 2004, compare with Held 2006).

Another literature, on voter behaviour, draws attention to the increasing neglect of (and 'withdrawal' from) institutions of representative democracy by citizens in OECD countries (Mair 2008). The voter turnout at national elections has fallen dramatically in the US and most of the new democracies in Central and Eastern Europe. The drop in membership levels of classic institutions of representative democracy, such as political parties and labour unions, has thoroughly marginalised organised labour representation in many countries.

Yet another body of research points at the increasing distrust of (scientific) expertise, triggered by affairs such as BSE, and controversies over e.g. genetically modified food and human embryonic stem cell research levying their toll on the credibility of scientists, politicians and corporations alike (Gottweis 1998, Hagendijk/Irwin 2006).

Due to these interlinked developments, the nature of democracy is changing in all political systems. The changed character of democracy has been captured under several headings, such as post-democracy or audience democracy. Under the term *post-democracy*, Colin Crouch understands the political regime in which public debates are tightly controlled spectacles, managed by spin doctors with voters playing a largely passive and often even apathetic role. Leaving aside the centre-stage electoral game, political questions are determined and solved between "elected governments and elites that overwhelmingly represent business interests" (Crouch 2004, 4).

Along a similar vein of critical thinking Manin (1997, in Mair 2008) speaks of a new *audience democracy* that is replacing representative democracy. Nowadays, he states, the sphere of conventional politics appears to be separated from the world of the citizens, which mostly is indifferent and passive to the "spectacle that plays out before it" (Mair 2008). While until the 1970s politics in a representative democracy was considered part of the citizen sphere, with citizens often actively engaging in it, 30 years later conventional politics by most citizens is observed as if 'from the outside'. According to Mair, this indifference to politics is one of the reasons for the larger role played in politics by non-partisan agencies such as courts, regulatory bodies and central banks. At the same time, it may be considered a reason for the increased frequency of institutional experimentation with referendums, citizens' juries and other state-initiated attempts at actively engaging citizens in politics and policy-analysis.

Against the backdrop of the unfolding globalisation, furthermore, nation-states often find to lack the power to solve important policy problems on their own, which forces them to cooperate across national borders, as well as across the public-private divide in various problem areas. As hierarchies and markets have often been seen to fail in administering political responses to important policy problems, networks are the preferred organisational form for governments to organise policy activities (Pellizzoni 2003, Hajer/Versteeg 2005, Hansen 2005).

The above dynamics have been captured with the term "governance" (e.g. Rhodes 1997, Kohler-Koch 1998, Hajer/Wagenaar 2003). Governance networks coordinate a number of policy actors of often quite different nature with respect to their size, form of organisation and goals. Policy solutions normally are negotiated amongst different players in the framework of these networks under the condition of institutional ambiguity. Governance networks have been hailed for their flexibility and the ability to solve problems, but they also "are often unstable, diffuse and opaque" (Sorensen/Torfing 2009, 236). Moreover they are not a level playing field in the sense of all involved actors having the same leverage or even opportunities of access (as the term "network" would seem to suggest), but they often are under the "shadow of hierarchy" (Scharpf 1994 in Sorensen/Torfing 2009), which is cast by metagovernors, often located within the formal arrangements of the nation-state.

Nevertheless governance networks have been seen as a remedy for uncertainty arising from complexity too large to be dealt with by a single actor - even when as resourceful as the state - and the “democratic deficit” stemming mainly from policy-making dominated by executive politics. Governance networks can take different forms, including advisory boards, deliberative forums, councils and panels of varying sorts, functions and influence. Depending on the flavour of democracy theory applied as a framework of analysis they appear more (elite, associational democracy) or less (liberal democracy) democratic. Social science analysis on the question of how democratic governance networks actually are is still rather rare (Torfing 2007, Sorensen/Torfing 2009).

In other words, there are two – often intersecting yet distinguishable – developments that characterise the changing nature of democracy, that both may be captured under the label of ‘participation’ in governing activities. On the one hand, there is an increase in network governance, where efforts at problem definition and resolution intentionally cut across the public – private divide. From the perspective of participatory governance, this development is often referred to as *stakeholder participation*. On the other hand, there is an increase observable in (often state-initiated) attempts at actively involving citizens in policy analysis and decision-making (in terms of participatory governance dubbed *civic participation*). The divide between the two is often not clear. Citizens may be considered ‘stakeholders’, and in turn, stakeholders may be involved in governing activities in a role of citizen or consumer. Yet it is worthwhile to distinguish between the two in our analysis, as criteria for participant selection and the intentions with which participatory arrangements are being designed differ widely. This may hold strong implications for the way the ‘democratic quality’ of the participatory events may be judged.

3 Models of Democracy Theory

A number of models of democracy are relevant for contemporary discussions on policy-making. Some of these are more confined to theoretical thinking, whilst others are directly linked to empirical research. In contrast to a large part of modern classic democracy theory with its often deeply philosophical reasoning, optimistic and also idealistic outlook on the world (e.g. John Locke, J.S. Mills) 20th century *elite democracy theories* are less based on normative idealisations, but on the discussion and indeed critique of actual politics.

Max Weber often is seen as the forerunner of elitist democracy theory. He is pessimistic about the effects of the rise of large organisations and bureaucracies on political life and sees the role of democracy in curbing the excesses of the rising political system (Weber 1985). He affirms a trend of "elected dictatorship" in a "plebiscitarian leadership democracy", equalising elections with plebiscites (Held 2006, 141). Schumpeter owns a lot of his ideas on democracy as formulated in "Capitalism, Socialism and Democracy" (1942) to Weber and sees modern democracy as a set of institutional arrangements with the goal to generate leadership and produce legislative and executive decisions (Held 2006, 142).

The perhaps most influential work of modern empirical social science combined with theorising on democracy was C. Wright Mill's "The Power Elite" (1956) in which the US society was depicted as being ruled by a small elite made up of politicians, industrialists and the military (Biegelbauer 1991). E.E. Schattschneider contended in "The Semi-Sovereign People" (1960) that US politics was heavily dominated by the upper class, effectively disenfranchising the working class (Hrebenar/Scott 1990).

With a similarly behaviouralist impetus (for which he was criticised in Bachrach/Baratz 1962 and 1963) Robert Dahl published in 1961 his influential study "Who Governs?" in which he analysed the political structures of New Haven, a town in Connecticut, USA. Dahl finds no dominant elite in New Haven's communal politics and instead sees it as a pluralist democracy. The study serves as the empirical basis for Dahl's variant of pluralism, from then on the most influential example of *pluralist democracy theories* (also *liberal democracy theory*; compare with Goodwin 1997, who interestingly mistakes the prominent pluralist political scientist David Truman (Truman 1956) for an elitist). Dahl developed his theory of polyarchy further over the next decades (Dahl 1998, 2003). He contends that a considerable number of groups take part and indeed make up US politics, with all of them getting (if not necessarily equal) access to policy-making. Thus, pluralist democracy theory advances that policy-making in liberal democracies is determined by a large number of groups, which effectively mirror the interests of society through the interplay of the different interest groups and organisations, paralleling pluralist interest group theory (Hrebenar/Scott 1990, Biegelbauer 1991).

Pluralist democracy theory has been created to understand US politics and has been charged with being US-centric and indeed with idealising the political system of the USA (Goodwin 1997, Crouch 2004). Nevertheless it is the dominant account of modern democracies, providing a flexible framework for the understanding of contemporary democratic regimes (Laird 1993). Pluralist theories are linked with *representative democracy* (as opposed to ideas of *direct democracy*, in which citizens have a more direct access to decision-making through instruments such as e.g. plebiscites and popular initiatives), granting elected political representatives a stabilising function for the political system, who can look after the common good (compare with Abels/Bora 2004).

Conceptions of direct democracy are at the heart of *participatory democracy theories*, which came out of the new social movements of the 1960s and 70s (Goodwin 1997, 299). David Held notes that the term “participatory democracy” was until the early 1990s the “leading counter-model” of the New Left to the notion of a *legal democracy* as forwarded by the New Right, which was based largely on the ideas of Friedrich Hayek of a minimal state tightly controlled by a civil society through the means of legal instruments (Held 2006, 209). Proponents of participatory democracy theory criticise currently existing representative democracies for offering only very limited possibilities of participation to individuals, which ultimately leads to disappointed citizens in the increasingly depoliticised public. In order to counter this problematique a societal transformation is offered, in which citizens should get more possibilities to participate in politics (Abels/Bora 2004, 26). Carol Pateman envisioned a community, in which individuals can develop themselves by taking an interest in politics, thus averting the estrangement from politics so characteristic of modern representative democracies (Pateman 2003, Held 2006, 212). Democratic procedures, participatory democracy theorists insist, should not be restricted to politics in its more narrow and legal sense, but extended also to other key institutions of society, such as that workplace and also decision-making at the local level, through which citizens can take control over the course of everyday life. Participatory models recently have again received increased attention, amongst others in conceptions of a cosmopolitan democracy (Held 2004, 2006), in the discussions on the democratisation of the EU (Pellizzoni 2003) in feminist theorising and as part of the discussion on participatory technology assessment (Abels/Bora 2004).

Liberal democracy is also criticised by *deliberative democracy theories*, which originated in the 1980s and continue to raise interest. Instead of the width and the mechanics and institutionalisation of participation, deliberative democracy theories stress the importance of the quality of political debate. They attack one of the central tenets of pluralist democracy theory, that democratic politics are primarily an expression of private views and interests (Goodwin 1997, 300). The main source of democratic legitimation as understood by the proponents of deliberative democracy theories is not the processing of the fixed preferences of the citizens in institutions optimised for performing the task, but it is in the process of preference formation. The focus of a deliberative democratic process then is on the way in which different political actors learn from each other's point of view and, through a process of

considerate deliberation of the different positions, arrive at a better understanding of the problems at hand (Held 2006, 233).

Many contributions to deliberative democracy are based on the work of Jürgen Habermas (Webler/Tuler 2000, Held 2006, McIaverty/Halpin 2008) in which different modes of decision-making are discerned: whilst bargaining would be associated with instrumental rationality, a logic in which actors try to defeat opposing views and to "win" an argument, deliberation is based on communicative rationality, in which actors stay open-minded, try to listen to opposing views and are ready to change their own standpoint. Communicative rationality can be understood as a "means to ensure the social coordination of action" (Held 2006, 236). In order to have a meaningful deliberation an "ideal speech situation" has to be striven for, free of coercion and power relations. In such a situation the very norms upon which the debate rests can become the subject of discussion. Moreover collective decisions in the end should be reached only after a debate in which all actors affected by decisions could take part and all relevant viewpoints were discussed (Hansen 2005, 55).

These conditions have been criticised as unrealistic, because power differentials, differing rhetoric abilities of discourse participants and other problems are likely to occur in an actual case of deliberation (Abels/Bora 2004, 29). Amy Gutmann and Dennis Thompson argue that for a deliberative praxis the concentration on the establishment of highly complex framework conditions and abstract sets of rules are less important than a concentration on more realistic, if non-ideal, situations (see Held 2006, 241). Their argument is that self-interested actors cannot be turned into altruistic persons and that the most difficult to solve real-world political problems rest on what has been called *intractable arguments* (Pellizzoni 2003; Hansen 2005, 2006) or *wicked problems* (Roberts 2004). In these cases conflicting interests are based upon worldviews and resting on norms and values, which are in a fundamental way differing and therefore incommensurable. First one sees a layer of conflicting interests and only upon closer analysis a second layer consisting of fundamentally divergent value structures becomes visible - as in cases such as abortion (Griessler 2007), genetically modified food (Hansen 2005), biobanks (Gottweis/Peterson 2008), XTP (Griessler/Littig 2003).

Conflicts on moral grounds might not be resolved, but mutually acceptable reasons should be sought before deciding on a course of action - and if that is not possible, a position of accommodation should be found consistent with mutual respect. A majority vote should only be taken when all discursive efforts have failed (Held 2006, 243).

The role and importance of consensus finding varies among the different strands of deliberative democracy theory. While some authors contend that the outcome of the deliberative process should be a consensus allowing for a political position (POST 2001, Held 2006), others believe this view to be erroneous since deliberative democracy should strive for maximising argumentation and deliberation and refrain from producing consensus

at the potential cost of repressing differences and actors' points of view (Felt et al 2007). Along the lines of the latter argument Chantal Mouffe has developed her own model of deliberative democracy, *agonistic democracy*, which stresses the inherent tensions of liberal democracy as well as the antagonistic and agonistic facets of democracy (Mouffe 1999).

Leaving aside the differences between the various strands of the respective democracy theories, a number of important differences emerge by way of comparison of a pluralist/liberal and a deliberative democracy model, which are depicted in figure 1. The most obvious difference is that the most active role in the pluralist democracy model is that of the politician, whereas citizens have a quite passive role - in the deliberative democracy model this is turned around.

Figure 1. Comparison of Pluralist/Liberal and Deliberative Democracy Models

Pluralist/Liberal Democracy		**Deliberative Democracy**
Elect politicians	Role of Citizens	Articulate and develop own interests
Effective and efficient professionals	Role of Civil Service	Facilitators, Co-learners
Steerers providing authority	Role of Politicians	*Overseers* meeting demands
Indirect: politicians are elected by citizens	Prime Legitimation	Direct: through citizen participation in different stages of the political process

A number of instruments have been devised for transforming the ideas of deliberative democracy theory into actual practice: deliberative opinion polls, deliberative days, voter feedback mechanisms, citizens juries and panels, standing consultative panels, consensus conferences and others (POST 2001, Fishkin 2003, Abels/Bora 2004, Held 2006). Whilst by now there exists a vast body of literature on deliberative democracy theory, there is only a limited amount of theoretically grounded empirically researched case studies on the usage of deliberative instruments (examples for such research are Abels/Bora 2004, Hansen 2005, Fischer 2006, Wagenaar 2007).

4 Concepts of Democracy

Different strands of democracy theory offer a variety of definitions of the term. Definitions of democracy can focus on political *processes* e.g. producing representation, accountability and legitimacy or on the *substance* of politics, e.g. entailing prescriptions to promote equality, fairness and inclusion. These dimensions can be differentiated further, in a *thin procedural* definition, concentrating for example on elections, and a *thick procedural* definition, also including constitutional guarantees and checks on the exercise of executive power (Mair 2008). Another distinction finds *restrictive*, concentrating on the state, and *expansive* definitions, including other societal sectors, e.g. the economy, mass media and educational institutions (Pelinka 1991).

Concepts of democracy have a general tendency to become broader over time. An example is Robert Dahl, who in 1971 concentrated on two dimensions of democracy, contestation and participation (compare with Campbell/Barth 2009), while almost three decades later listed five criteria for a democratic process:

- effective participation, all citizens must have equal and effective opportunities to make their views known to the others as to the planned course of action;
- voting equality, all citizens must have an equal and effective opportunity to vote, with all voters counted as equal;
- enlightened understanding, each citizen must have equal and effective opportunities to understand policy alternatives and their consequences;
- control of the agenda, all citizens must have the opportunity to decide on the matters to be placed on the agenda; policies therefore must always be open to change;
- inclusion of adults, all, or at least most, adult permanent residents should have the full rights of citizens consisting of the first four criteria (Dahl 1998, pp.37).

For an expansive concept of democracy Guillermo O'Donnel insisted on an inclusion of a social dimension, i.e. human rights and human development. For the latter he used the United Nations Human Development Index (HDI), which includes life expectancy, education and wealth (O'Donnel 2004 after Campbell 2009, 213).

Most modern concepts of democracy do not restrict themselves to a narrow understanding of politics and do not concentrate exclusively at the workings of the state, but include also factors from, for example, the organisation of the economy and civil society. Even with a relatively more narrow understanding of politics and democracy, as is the case with the aforementioned five dimensions of Robert Dahl, the understanding of policy alternatives and their consequences by citizens by far extends older notions of democracy, such as that of Joseph Schumpeter, which focused on elections.

5 Comparing and Classifying Democracies

From what has been said above it can be deduced that democracy by most accounts is a multi-dimensional concept. Difficulties arise from this fact not only for the definition and conceptionalisation of democracy, but also for purposes of comparison and classification.

The perhaps most influential classification of democracies was developed by Arend Lijphart (1999), who distinguished between majoritarian and consensus (earlier: consociational) democracies. The term *majoritarian democracies* signifies political systems with, amongst others, a two party system, a single-party majority cabinet, a majoritarian electoral system and a unitarian and centralised government. Here the executive authority obtained through winning an election is quite extensive. The term *consensus democracy* stands for systems, amongst others, featuring a multi-party system, a broad coalition cabinet, a proportional electoral system and a federal and de-centralised government (Lijphart 1999, pp. 3). There executive power is shared and limited by a constitutional courts, a second chamber and a federal system. Typical cases for majoritarian systems are the UK and New Zealand, with Belgium and Switzerland being typical for consensus cases.

An extensive set of eight institutional and systemic indicators made up Lijphart's original model from 1984, i.e. the nature of the executive branch, the executive-legislative relations, the party system, the electoral system, the government, the legislature, the constitution, the judicial review and, in the version of 1999, also the interest group system as well as the central bank. These are grouped along two dimensions: the executive-parties (or joint-power) and the federal-unitary (or divided-power) dimension. The *executive-parties dimension* consisted of the degree of electoral disproportionality, the effective number of parties, the frequency of single party government, the average cabinet length and the interest group system (pluralism versus neo-corporatism). The *federal-unitary dimension* included bicameralism, federalism, judicial review, constitutional rigidity (possibility of constitutional amendments) and central bank independence.

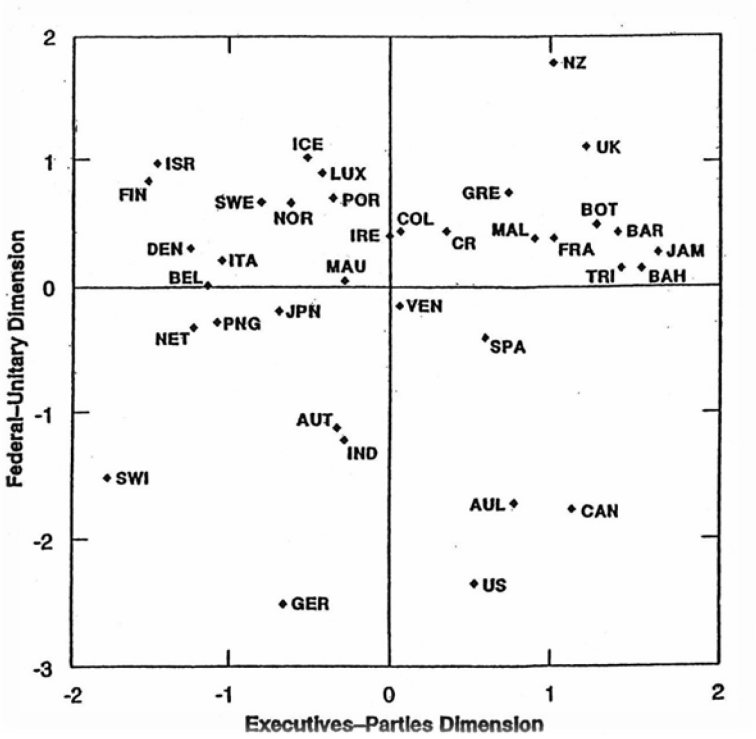
Near the end of his book Lijphart draws a two-dimensional conceptual map of democracy, in which he presents the overall patterns of his analysis. The horizontal axis displays the aggregated values for the executives-parties and the vertical axis for the federal-unitary dimension. The positive and negative values represent units of standard deviation, with higher values standing for majoritarianism and lower values indicating consensus (Lijphart 1999, 247).

Figure 2 is a reproduction of this conceptual map of democracy. The remarkable pattern to be seen is that besides the UK most of the countries on the right-hand side of the figure are former British colonies, with most continental European countries being located on the left-hand side. This would seem to be an indicator that "the presence or absence of a British

political heritage…appears to explain the distribution on the left and right side of the executives-parties dimension better than any geographical factor" (Lijphart 1999, 250).

Lijphart has also a second agenda, he wants to show that consensus democracies are "kinder and gentler". He shows that they have a higher likelihood to feature welfare states, they are more likely to protect the environment, to imprison fewer people, to be more generous with their economic assistance to the developing world and are less likely to use the death penalty. He is also giving indications from social science research that, amongst others, consensus democracies better represent women's interests, foster political equality stronger, feature a higher participation in elections and a closer proximity between government policy and voters' preferences (Lijphart 1999, pp.275). In short: he believes them to feature the better model of democracy.[2]

Figure 2. Lijphart's classification



Lijphart 1999, 248

[2] Indeed this is a consistent theme throughout his career as a social scientist, as one can see in "Thinking about Democracy", a volume bringing together 18 papers from the 1960s to the 2000s (Lijphart 2008).

The model was built in an inductive fashion: the actual case of the UK was taken as one end of a continuum between majoritarian and consensus systems (Lijphart 1999, pp. 9). As can be seen from the categories making up the two dimensions of Lijphart's model, it did not simply single out one or few factors deemed to be important for the characterisation of a political system, but was an attempt to construct a holistic model of democracy. While the model provided a score of new insights, it was also criticised (Mair 2008, Vatter 2009). The features making up the majoritarian model compared nicely to the respective political system of the UK. Similarly Belgium and Switzerland fitted in at the consensus end of the spectrum. Yet most other cases in between were a mix of both majoritarian and consensus features - a problem the model of Lijphart shares with similar attempts of comparing democracies wholly, because real world political systems are historically contingent, combine features from a variety of origins (and often enough are themselves the result of learning and/or transfer from different political systems) and do not fit easily into textbook categories (Mair 2008).

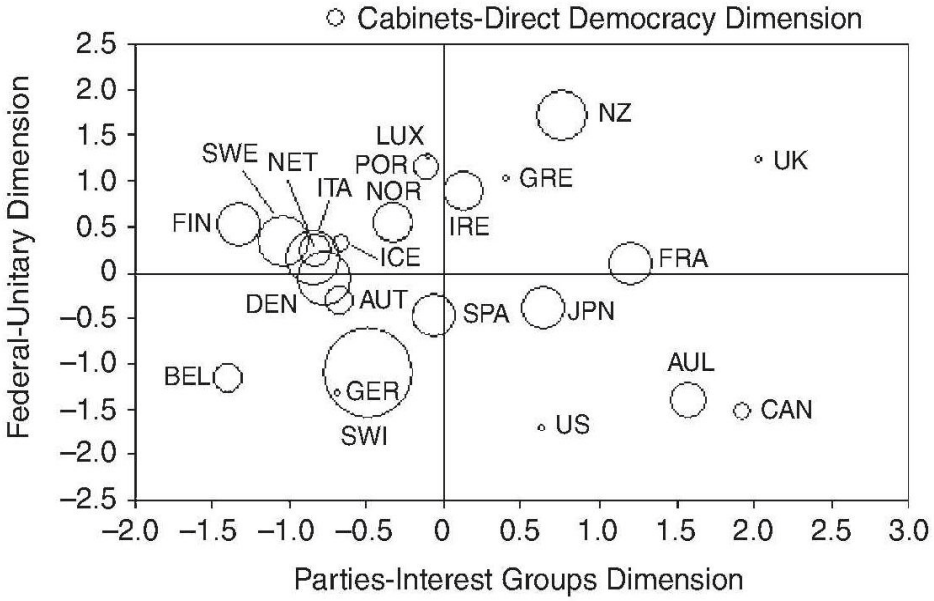
While Adrian Vatter could not overcome this basic problem of the classification and comparison of democracies, he was able to refine Lijphart's work by countering some of the other points of criticism made against it, such as the selection of 36 countries displaying a very different level of socio-economic development which made actual comparisons difficult and skewed the composition of the two groups of democracies. [3] There had been also criticism against the conceptualisation of the executive-legislative relationship, which in the original work was measured by the average cabinet duration. Against this has been brought forward that a short lived government is likely to indicate a weak government, but not necessarily a strong parliament, in other words it does not say anything about the relationship between executive and legislative (Vatter 2009). Several of Lijphart's indicators have been restructured by Vatter, all have been updated with the empirical analysis restricting itself to 23 advanced OECD countries featuring a comparable degree of economic wealth. In addition the power relations between the governing elite and the population have been taken into account in a measure of direct democracy and the category federalism was split into two, one focusing on the political (as laid down in the constitution) and another on the fiscal division of power, which now raises the number of variables to twelve.

Vatter sums up his findings in a three-dimensional conceptual map of democracy, which is based on the graphic representation of Lijphart's findings, which are displayed in figure 2. Again the aggregated values for the executives-parties are displayed on the horizontal axis and the federal-unitary dimension is mirrored on the vertical axis. The high values are indicators for majoritarianism and to lower values for consensus. The third dimension, added by Vatter, is represented by the size of the bubbles, which show the relative importance of

[3] Lijphart later has responded to this critique by stating that the costs of having 13 fewer cases would seem to him to be more of a sacrifice than having to worry about the potential problematique of a single variable (Lijphart 2008, 270).

each data point with one bubble standing for one country. A large bubble symbolises high values for the third dimension and means an active direct democracy and oversized multi-party governments, a small bubble indicates a purely representative democracy in minimal winning governments (Vatter 2009, 144).

Figure 3. Vatter's revision of Lijphart's classification



Vatter 2009, 145

By and large Vatter confirms Lijphart's findings, with most continental European countries still being on the left-hand side, the UK and its former colonies located on the right-hand side. Furthermore the UK continues to be an ideal type of the Westminster model. Belgium has become more federal and therefore in general comes closer to being the prime example of a consensus democracy. Switzerland is no prototype of consensual-federal democracy any more, yet it is the leading example of a direct democracy, along the lines of the third dimension introduced by Vatter. Farthest along the road towards the opposite, a purely representative democracy, are Germany, the US and the UK (Vatter 2009, 145). Vatter also distinguishes between two types of consensus democracies with different powersharing strategies: a *parliamentary-representative* type, strongly influenced by the search for compromises by the elected party leaders, such as Belgium, and a *direct democratic* type, characterised by the integration of political forces into government through the instruments of direct democracy, with Switzerland being the prime example (Vatter 2009, 147).

6 Evaluating Democracies and Democratic Instruments

Most efforts to evaluate and indeed measure the performance of democracies are highly structured, complex and aggregated. Well-known examples for quantitatively oriented indices are e.g. the Freedom-House-Index, the Polity-Index and the Democracy-Index (compare Müller/Pickel 2007, Bühlmann et al 2008, Lord 2008, Campbell/Barth 2009). Fewer are the examples of qualitative indices, such as the Democratic Audit and the RECON Democratic Audit, which have to face the drawback of being less comparable then quantitative indices, yet have to be less parsimonious and to care less about scales and data aggregation (compare Müller/Pickel 2007, Lord 2008).

All well-known indices are based on pluralist/liberal democracy ideals (Müller/Pickel 2007, Bühlmann et al 2008). Moreover, similar to what has been said before about attempts to classify democracies, efforts to measure democracies suffer, amongst others, also from the problem of multidimensionality of democracies (compare Müller/Pickel 2007, Bühlmann et al 2008). This is especially the case for democracy indices, which try to reflect the performance of whole political systems, but in a lesser away also for efforts singling out specific aspects of political systems such as certain sectors, institutions or instruments.

In principle concepts for the evaluation of democracy can be *deductive-absolute*, starting from a normative idea of democracy and deducting a concept of democracy for an empirical analysis, forming an absolute scale for the measuring of democracies. They also can be *inductive-relative*, categorising all democratic regimes and comparing their strengths and weaknesses. In reality the existing approaches of measuring democracies mix both deductive-absolute and inductive-relative concepts (Müller/Pickel 2007, 512).

Another conceivable way of an inductive-relative conceptualisation would be to benchmark an ideal-type system, institution or process as was and indeed is ever again the case with the depiction of the USA as the prime example and not just one (if important) model of a democratic system (Almond/Verba 1963, Lijphart 2008). This comes, however, at the cost of being normative without saying so.

Gene Rowe and Lynn Frewer have put forward a framework for the evaluation of public participation methods utilising a deductive-absolute way (Rowe/Frewer 2000): They first looked for aspects of participation processes they deemed to be desirable and then advanced measures for presence or quality of these aspects. Following from this they advanced acceptance criteria on the potential public acceptance of a procedure and process criteria on the effective construction and implementation of a procedure. They argued that both sets of criteria have to be fulfilled for a public participation exercise to be considered satisfactory. Their model is made up of the following *acceptance criteria*:

- criterion of representativeness, stating that the participants should make up a broad representative sample of the effective public, in order not to disenfranchise segments of society; either a random stratified sample of the affected population or questions on the spread of attitudes regarding a specific issue could be polled and used as the basis for a proportionate member selection;
- criterion of independence, advancing the participation process to be conducted in an independent way, especially with respect to the sponsoring institution; members may be drawn from diverse bodies or neutral organisations and a respected facilitator might be helpful;
- criterion of early involvement, suggesting that the public should be involved as soon as value judgements become important, so that the psychological and sociological understandings of risk can be understood; debates should focus on underlying assumptions and agenda-setting, not just on narrow, superficial and predefined problems;
- criterion of influence, advancing that the procedure should have a genuine impact on policy, in a way recognisable by the public to circumvent public scepticism and distrust; it should be made clear beforehand as to how the output of the participation exercise will be used;
- criterion of transparency, suggesting that the public should be able to see how decisions are being made so that possible public suspicions about the sponsors' motives can be countered.

The model includes the following *process criteria*:

- criterion of resource accessibility, stating that participants should have access to the respective resources in order to enable them to fulfil their part; this would include human, material and time resources;
- criterion of task division, advancing that the nature and scope of the participation exercise has to be clearly defined, in order to keep confusion and dispute to scope, expected output and mechanisms of the participatory method as small as possible; all of these aspects should be made clear early on;
- criterion of structured decision-making, suggesting that the participation exercise is to provide participants with mechanisms for structuring and displaying the decision-making process so as to increase transparency and efficiency;
- criterion of cost-effectiveness, saying that the procedure should be cost-efficient in order to provide value for money (Rowe/Frewer 2000, 12-17).

The framework has been derived from theorising and was applied in an evaluation of a variety of participation instruments. Whilst this evaluation is based not only on the judgement of the authors, but also on a comprehensive literature review, it was not based on an empirical test of its categories. It nevertheless is an interesting combination of parsimony, practicability and moreover includes a number of suggestions similar to those discussed

elsewhere when it comes to the issue of evaluating participatory exercises (Laird 1993, Webler/Tuler 2000, Joss/Bellucci 2002, Hamlett 2003, Pellizzoni 2003).

7 Classifying TA and PTA

A vast number of different public participation methods have been developed over time (Roberts 2004, Lengwiler 2008). Examples are as different as referenda and popular initiatives, public hearings and enquiries, public (deliberative) opinion polls, focus groups, Internet dialogues, negotiated rulemaking, public advisory committees, citizens juries and consensus conferences. One group of participatory instruments used in dealing with technologies and their effects are Participatory Technology Assessments (PTA).

Technology Assessment (TA) is a form of analysis in which technological developments are scrutinised in relation to societal developments (Loeber, 2004). *Participatory TAs* are tools for aiding decision-making on technological developments, providing a comprehensive analysis of the conditions and consequences of (new) technologies in a participatory manner. PTAs are instruments displaying a variety of functions, designs, procedures, compositions of membership, framings and linkages to the institutions of the representative democracies they are part of.

Technology Assessment (TA) is both the process and product of a specific form of policy analysis that focuses on the interrelation between technological and societal developments. TA as a form of policy analysis is a relatively new concept, which was conceived of originally in the 1970s to identify ways to counteract the adverse effects of technological innovations at an early stage in their development. The idea was that TA studies could provide decision makers with objective information on those impacts, whereupon they would incorporate this information in their professional work that would thus result in ‘better’ or ‘safer’ technologies. This classical “critical-synoptic” perspective on TA (Grin/Hoppe 1995) was abandoned when it became clear in practice that the impact of technology can only be partly foreseen. Furthermore, as was the case with policy analysis in general, lessons from experience impelled a reassessment of TA. TA-studies appeared to have disappointingly limited impact, as the potential users often found the information not valid or useful. Moreover, the idea of impartiality and objectivity of analysis on technology and policy gradually was reconsidered.

The classic interpretation was replaced by the idea that the societal basis for decision-making on technological development should be broadened. A large variety of initiatives with that purpose have transpired since. These TA-practices are characterised by numerous attempts at classification, either based on the functions that TA-studies can serve or on the methodology employed. Both sets of criteria intersect. Smits and Leyten (1991), for instance,

distinguish between 'Awareness TA' (ATA) (with a focus on long-term technological potentials, developments and the creation of awareness concerning the societal choices), 'Strategic TA' (STA) (which is sector- or problem-specific and has a medium time horizon), and the 'Constructive TA' (CTA) (with a focus on short-term design and construction stages of the innovation process) (1991:308-317; cf. Mayer 1997:16). Furthermore, there is the classification of Bechmann (1993) who differentiates between an 'Instrumental Model' of TA, which aims at increasing the effectiveness of political and administrative procedures concerning technology policy, the 'Elite Model' that requires the participation of highly qualified experts, and a 'Democratic Model' that details a significant role for the general public in its evaluation of science and technology. It is this latter type of TAs that is now commonly referred to as 'Participatory TA'.

An international comparative evaluation of participatory TA, which has been initiated in the late 1990s by a number of national TA institutes (an EU-supported research program with the acronym 'EUROpTA', see Joss/Bellucci 2002), showed clearly the tremendous diversity in concepts, methods and techniques which have been developed under the umbrella-name of pTA in response to, and under the influence of, the needs and characteristics of specific national contexts (Joss & Bellucci 2002).

The diversity occurred in response to the wider socio-cultural changes in perceiving technology, from science and technology policy seen as an economic and cultural factor and a problem solver to the more encompassing mission of science, technology and innovation policies as a source of strategic opportunity for the development of society and economy (Biegelbauer 2000, Biegelbauer/Borrás 2003). As a reaction ever more comprehensive models of TA were developed, including PTA, which had already been used in parallel with TA.[4] Yet the instrument gained in importance in the 1990s, with the rising demands from society to take part in decision-making in an attempt at actively involving citizens in decision-making (see section 2) in general, and in particular in view of a growing public concern over future technologies (such as rDNA-technologies) and an equally growing lack of public trust in formal policy arrangements to deal with wicked problems such as nuclear energy.

Among the many classifications of the numerous forms of PTA arrangements, the distinction between expert/stakeholder PTA and the one hand, and public PTA on the other hand is an important one. This distinction rests on the differentiation between the kinds of public a PTA wants to address. On the one hand, there are the TA-studies that aim at a broadening of the design processes of technological development. These include forms of TA that focus explicitly on the societal aspects of a given technology in order to influence the development in tune with (future) users' preferences. Such TA procedures are being developed on the

[4] The first consensus conferences in biotechnology for instance have been organised in the United States already in the 1970s (Lengwiler 2008, 193).

basis of insights from the field of science dynamics. A prominent example of such TA is Constructive TA (CTA), a concept developed in the Netherlands that is internationally adopted. CTA, according to its initiators, is a design practice in which impact is anticipated through an early involvement of users and other impacted communities in the R&D process (cf. Rip et al. 1995; Schot & Rip 1997; Smit and Van Oost 1999). On the other hand, there are examples of TA that are undertaken with the intention of supporting processes of opinion forming and political judgment on technology in the public domain. This notion of so-called 'public technology assessment' has been institutionalised in many Western countries, such as in the now abolished Office of Technology Assessment (OTA) in the US and, still in office, the Rathenau Institute in the Netherlands (Loeber, 2004).[5]

In the latter case of public PTA, the general public (represented usually by non-organised lay citizens) deliberates on policy problems, trying to clarify and also to settle existing conflicts on (and for) the common good. In the case of expert/stakeholder PTA a more limited public is addressed, with experts and representatives of organised interests discussing a policy problem in a cooperative and dialogical way (Joss/Bellucci 2002, Pellizzoni 2003, Hansen 2005).

TAs and PTAs then can be classified along the dimensions of the key constituencies and the major functions of the assessment exercises, as laid out in figure 4. All three forms of TA, expert, stakeholder and citizen (P)TA, can feature functions of legitimation and/or problem-solving. Experts are primarily used for their expertise on a certain topic, which can be understood as symbolic capital legitimising political decisions and/or as an input into policy-making with the goal of solving the problem. Stakeholders, mostly in the form of organisations, can be used to legitimise a political decision with their organisational power, their reputation or the size of their membership. They can also be used in TAs on the basis of their knowledge and experience. In PTAs citizens can be used to legitimise public participation exercises in several ways, depending on the theoretical lens being used, in a symbolic way, e.g. to show that a certain government listens to people's wishes, to empower citizens or to foster social learning processes among citizens. Citizens moreover may be utilised for raising acceptance or as a sounding board for testing political decisions.

---

[5] In spite of the common denominator of participation in these TA-concepts, activities for involving a plurality of perspectives in the assessment aimed at influencing either technology policy or technology development itself are by and large considered fundamentally separate forms of analysis. The director of the Dutch TA-institute underlined this dichotomy thus: "Consensus activities and constructive Technology Assessment both spring from the idea that the basis for decision-making about technology should be broadened. Both also share the conviction that interaction among actors is important in conducting assessments. But, although closer links are often suggested, I do believe that these do not necessarily exist. Consensus conferences and the like emerge from a specific ideal of participatory democracy, and they can therefore be seen as a kind of public Technology Assessment; whereas the main point of constructive Technology Assessment is influencing technological choice. These two directions may entail very different viewpoints and make use of very different bodies of knowledge" (Van Eijndhoven 1997:281).

Figure 4. Members and Functions of TAs and PTAs

	Legitimation Function	Problem Solving Function
Experts: TA	Utilising knowledge as the prime symbolic capital of experts and their institutions	Utilising the knowledge of experts
Stakeholders: TA	Utilising the organisational power of associations, representing affected organisations	Utilising the organisational power of associations, their wealth of experience
Citizens: PTA	Through the lenses of pluralist/liberal democracy theory: symbolic; participatory democracy theory: empowerment of citizens; deliberative democracy theory: social learning of citizens and politicians.	Utilising citizens: for raising acceptance; as a sounding board; for gaining new ideas; for solving ethical problems.

Summing up TAs and PTAs can be distinguished in several ways, three of which are:

- along their democratic impetus (instrumental, elite, democratic),
- along their functions and methodology (awareness, strategic, constructive TA),
- along their members and functions such as suggested in figure 4.

Yet another way of classifying TAs and PTAs has been proposed by Gene Rowe and Lynn Frewer (2005). Starting from the relationship between the sponsors of public engagement mechanisms and the public they draw a distinction between communication (one way flow from sponsor to citizens), consultation (one way flow from citizens to sponsor) and participation (some degree of dialogue between citizens and sponsor). Based on their definition of efficiency, which is “maximizing the relevant information (knowledge and/or opinions) from the maximum number of relevant sources and transferring this efficiently to the approporiate receivers” (Rowe/Frewer 2005, 263) they identify several key mechanism variables (Rowe/Frewer 2005, 265) for a typology of public engagement mechanisms. These key variables are: selection method (controlled/uncontrolled); elicitation facilitation (yes/no); response mode (open/closed); information input (set/flexible); medium of information transfer (face-to-face/non face-to-face); faciliation of aggregation (structured/unstructured). Applying these variables to a huge number of public engagement mechanisms they come up with four subtypes of communication mechanisms, six subtypes of consultation mechanisms and four subtypes of participation mechanisms.

8 Implications for Research Design: the Issue of Impact

The classification of types of (p)TA found in our empirical work is useful for the purpose of comparison between the cases, and in order to draw generic conclusions about the relationship between (p)TAs and their respective methods and designs on the one hand, and their impact on (more or less democratic) decision-making on xenotransplantation and related issues. In order to do so, we must pay due attention to the methodological intricacies implied in the word 'impact'.

The objective of the empirical research is to provide a clear view on the interplay between a) the methods employed in a TA-project, b) the way it works out in actual practice, c) its context(s) in which it is enacted and the dynamics at play there, and finally, d) the processes of policy formulation and technological innovation on which it reflects and which it seeks to address. The conceptual framework should provide a basis for describing, analysing (and classifying) and discussing the projects, yet does not aim to provide a normative model on the basis of which to judge the respective cases as to their 'democratic quality' at face value. To judge the TA experiments under scrutiny, they will be related to the impacts. This puts the issue of 'impact' centre stage.

There are two separate aspects of the 'impact issue' that deserve attention. Let us first consider the meaning of the phrase. Next, we shall turn to the aspect of attribution: how are we to establish whether some observable phenomenon is *caused* or *co-shaped* by the pTA and hence can be considered an 'impact' of the latter?

8.1 Consideration on the meaning of the word 'impact'

A (p)TA-event is likely to result in (immediate) material output in the form of books, reports, models et cetera. For such products, we propose to use the word *results* (or, alternatively, *output*). Through these products, but also via other means (e.g. media reporting on the TA project), the findings of the project are conveyed. These findings may encompass such insights as the project's resultant problem definition, the formulation of potential options for action that may contribute to the reduction or amelioration of that problem, and the accumulated insights in whether and how actors may be motivated to adopt those courses of action, and which actor groups should be engaged in that process. We propose to refer to such immaterial outputs as the project's *outcomes*. Both results and outcomes of a project, but also its mere occurrence, may affect the context in which the TA-event is staged. The resulting dynamics may be captured with the word *impact*.

Having established the meaning of the word impact as distinct from outcome and output, the question is what we consider to count as impact, and where we are to look for that kind of impact.

The most straightforward interpretation of 'impact is the precipitation of a project's outcome in policy documents (and if we wish to include that, in research programmes, as may be the case in Constructive TA or alternatively 'stakeholder TA'). In this case, the contribution of a TA-project to processes of policy formulation and of technological innovation hence is considered the adaptation of the problem definition and/or options for solution in documentation of formal (democratic) decision-making. Yet, this rather narrow interpretation of impact, however relevant to establish, may foreclose the inclusion of a TA-event's impacts in the empirical research that may be equally relevant to observe.

Even without concrete manifestations in terms of a changed problem definition or inclusion of new options for action in formal documentation, TA-events may have an impact. Those involved, be they the projects initiators, participants or observers, may develop new insights and understandings about the issue at hand, and/or about his or her position and role in relation to that issue. These changed views and new preferences in turn may influence his or her professional and personal activities. When actors start to rethink their professional behaviour, consumer behaviour, policy theory, future business projects and so on in the light of the TA-event this may equally be considered an event's 'impact'. How to capture yet such illusive effects?

Effects in the sense of a 'rethinking' of prior held views and insight are often understood in the literature in terms of 'learning'. Because the verb learning is so commonly used, both in policy scientific literature and in every day language, it is necessary to carefully establish the meaning of the phrase. Learning as it is used here is defined as the occurrence of "relatively enduring alterations of thought or behavioral intentions that result from experience (…) [and] involve (…) perceptions concerning external dynamics, and increased knowledge of the state of the problem parameters and the factors affecting them" (Sabatier 1987:654). Without necessarily adopting Sabatier's research agenda and preferred methods[6], this interpretation of learning is very useful, especially when it is linked to the notions of 'theories-in-use' (or 'frame') and 'reflection-in-action'as elaborated by Schön (1983; Argyris and Schön 1974, 1996). In such a perspective, learning may be understood as the changes occurring in the mental map (a 'frame') consisting of theoretical, normative and empirical considerations that actors, be they state actors or non-state actors, invoke and put to use in their professional activities. The map is being reviewed in the process of learning as an *integral aspect of* daily practice: observation and experience provide a continual flow of information through which an actor comes to reflect on his goals and actions, and on the way in which these relate to one another in relation to the context in which he operates. Since 'the situation' is inherently transient and dynamic, the learning actor is continually engaged in such processes of reflection. These may occasionally rescue him from the flux of time ("reflection-on-action" in

[6] The so-called Advocacy Coalition Framework, which Sabatier and colleagues have developed on the basis of survey research and other neo-positivist informed empirical work.

Schön's terminology) yet generally will involve a constant conversation with the world around that translates into action ("reflection-in-action") on the spur of the moment. Such an inclusive reading of the learning concept differs from more restrictive views as it does not limit the focus on impact on *instrumental* learning. In instrumental learning, the learning political actor engages in reflection on policy-related decisions taken in the past (or elsewhere) in order explicitly to improve future decision-making. In the more inclusive reading, the purpose of engaging in learning processes (if at all a conscious act of will) is to develop and continually adjust a strategy for shaping and implementing plans and ideas on what is considered appropriate and good conduct under given circumstances, aimed at solving problems in a way that is contingent on and optimized for the situation encountered.

This understanding of what learning entails prompts us to pose the question, in the light of our quest for 'impact', *where* to look for such impact, beyond the policy documents we earlier identified as sources of relevant information.

As learning (in the sense of 'rethinking') may be a necessary yet not a sufficient precondition for change in an actor's actions (in the absence of coercion), a concretely observable change in action (policy programmes, research programmes and so on) is not the sole indication of impact. A useful option to establish the occurrence of learning is offered by *discourse analysis*.

Discourse analysis is the systematic studying of the ideas, concepts and categorizations through which actors allocate meaning to social and physical phenomena. A first point of entry is the particular language being used. Language is a system of signification, which not only pictures the world but profoundly shapes an actor's view of it (Fischer and Forester 1993). By studying discursive exchanges, we might be able to trace the vehicles by means of which a disparate group of actors finds ways to address public problems in a way that participants find meaningful (Hajer 1995).[7]

An empirical focus on voices, discourses and social learning (changing frames) per definition widens the range of where we are to look for impacts, beyond formal policy documents. The question is how to limit our search in a justifiable manner, in terms of time (when to start our policy tracing) and in terms of width (whom -who's learning processes – and what -which policy and technology-related dynamics and which discourses) – are we to include in our

[7] In addition to language, researchers may also take into consideration the settings in which language is being used (after all, as Austin (1955) pointed out, to say something is an act). The empirical focus then also includes the way the 'speaker' conveys his/her message, the way its 'audience' receives it, and the setting in which this interchange takes place. The underlying idea is that the setting influences what is being said, what can be said and what can be said with influence: the setting defines the act to a certain extent. This is referred to as the 'performative dimension' of discourse (Hajer, 2009; Hajer & Versteeg 2005)

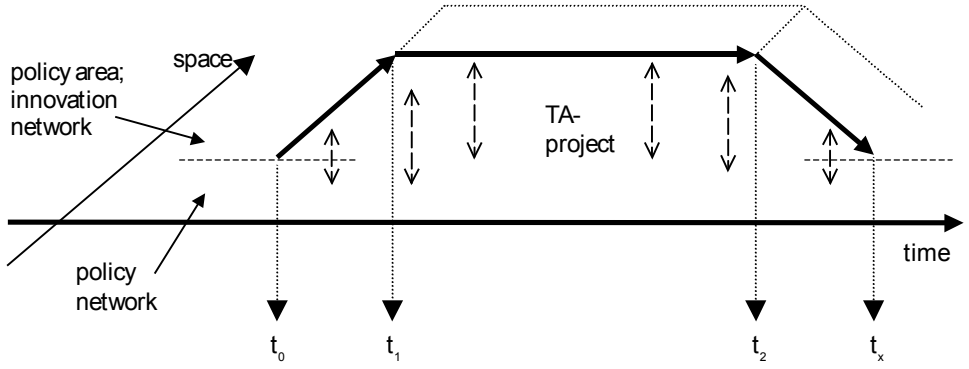
empirical work. The below may offer a practical approach to formulating answers to these questions.

8.2 The aspect of attribution; a TA-project and its impacts as the object of research[8]

In order to establish a point of entry for data collection and case descriptions, the TA projects under scrutiny can serve as a starting point for determining which data are of relevance. The TA project hence is put centre stage. This is the case even when, from another perspective, the analytic project may be considered only a minor element in the events and interactions that, during a specific period of time, have led to changes in the processes of policy formulation or technological development under scrutiny.

The TA projects under scrutiny may be conceived of as events that for a period of time unite a variety of actors in discussing and analysing an artefact and/or technological procedure in the light of economic, social and ecological considerations. The actors may be conceived of as intentionally acting individuals representing organisations, and their actions as being guided by their interpretive frames and enabled or constrained by their respective resources and limitations. This understanding of an analytic project as the object of research can be graphically depicted as follows.

Figure 5. Exchange of information between a project and its context



(Source: Loeber 2004)

[8] adapted from Loeber, 2004

Without implying any inferences about their relative importance in relation to the chain of events in either public policymaking, innovation processes, social learning and so on that took place at the time of their staging, the TA-event hence may serve as stepping stone in organising the empirical work. In figure 5, a TA project is depicted as a process of deliberately organised interactions among a variety of actors across space and time. This depiction of a TA-project within its context serves as a heuristic model that offers guidance to the empirical exploration. The model is not, in any way, intended as an explanatory framework. It does, however, capture the dynamic character of both the TA-project and its context, by presenting the 'space' axis and the 'time' axis as interconnected through the activities of actors.

Each project is likely to encompass a stage of preparation before the actual analytic process starts off. The latter moment is designated as t_1, since the moment that the preparations commence may not easily be pinpointed in time (t_0). At this stage, the intentions of the project, its initial problem definition and the expected results are being formulated. The end of the analytic project is marked t_2, and is recognisable by the formulation of an end-conclusion and/or the production of an end-document of some kind. The impact of the analytic project theoretically may continue for an indefinite period of time. Therefore, also in this respect, a caesura in time cannot be clearly marked (t_x).

The TA-event is depicted as being staged in a context that comprises both a policy network and an innovation network.[9] Such networks observably exist or come into being 'around' a technology (cf. Callon et al. 1992;) and/or a policy issue (cf. Sabatier/Jenkins-Smith 1993; cf. Dewey 1991, Marres 2005). The distinction between the two types of networks is largely analytic as they inevitably partly overlap, both in terms of actors and of interactions (see the above discussion on network governance). Still, a distinction between the two is useful since either context is characterised by a specific set of rules and traditions (i.e. structures such as professional training, notions of 'good professionalism', reward systems and so on). Therefore, the relation between both contexts of a TA project is best understood as one of a "seemingly seamless web" (Van Est 1999:19, 190).

Not only projects evolve over time, also the conditions under which they are staged change. The dynamics in the policy process and/or the innovation process on which a TA project

[9] A techno-economic network Callon *et al*. (1992) define as "a coordinated set of heterogeneous actors – public laboratories, technical research centres, industrial firms, financial organization, users, and public authorities – which participate collectively in the development and diffusion of innovations, and via numerous interactions organize the relationships between scientifico-technical research and the marketplace" (1992:22). While Callon *et al.* mention public authorities as an integral element of the network in which technological innovation takes place, in the further elaboration of the concept, they predominantly focus on scientific, technical and market actors (the three major 'poles' of the network, in the jargon of Callon *et al*.) It may be clear that here, the policy actor is given explicit attention in the descriptions of the networks in the present research, as are relevant other actors such as NGOs and not-for-profit organisations (not mentioned by Callon *et al*.).

focuses, result from and co-determine the actions of the relevant actors that together constitute both networks. Their room for manoeuvring and their recourses depend largely on contextual factors.

In order to 'map' impacts hence, the dynamics in relevant networks (discursive changes, new programs etc.) could be taken into account, as well as (more concretely, on a different aggregation level, if memories permit) the individual learning processes that may have occurred among those that participated in the TA-event under scrutiny.

In addition to its substantive elaboration, the use of the word 'impact' requires further explication in terms of research approach. The notion of impact implies an assumed *causal relation* between a phenomenon (such as a TA-project) and changes in its context. Researching such a relationship is not without complication. The causal relationship between two phenomena may be assessed unambiguously only in those cases where two or more variables are clearly distinguishable from one another and from any other variable in the context. This obviously is not the case when researching TA-projects as social phenomena.

In order to establish whether or not the TA-event indeed influenced the dynamics observed (and hence may be considered to be the cause, or 'causation' and the dynamics observed its impact), it seems wise to interpret cause-effect relationships between these in terms of "mutual simultaneous shaping" (Guba & Lincoln 1989), and to establish the link in terms of *plausibility*. To argue whether a link is plausible, it is important to map other developments that may (arguably) have had an effect on the dynamics described. The impact of a TA project then can be conceptualized as those changes in the interpretive frames and actions of relevant actors that can plausibly be related to the project taking place, both on the basis of the views of the involved actors themselves and on the basis of reasoned arguments by the investigating outsider.

9 Literature

Abels, G. and A. Bora (2004): Demokratische Technikbewertung. Bielefeld: trancript.

Almond, G. A. and S. Verba (1963): The Civic Culture. Political Attitudes and Democracy in Five Nations. Princeton/New Jersey: Princeton University Press.

Argyris, Ch. and D. Schön (1974): Theory in Practice. Increasing professional effectiveness. San Francisco: Jossey-Bass.

Argyris, Ch. and D. Schön (1996): Organisational Learning II; Theory, Method, and Practice. Reading Massachusetts: Addison- Wesley Publishing Company.

Bachrach, P. and M. S. Baratz (1962): „Two Faces of Power." In: The American Political Science Review 56(4), pp. 947-52.

Bachrach, P. and M. S. Baratz (1963): „Decisions and Nondecisions: A Analytical Framework." In: The American Political Science Review 57(3), pp. 632-42.

Bechmann, G. (1993): „Technology Assessment: Democratic function of technology-assessment in technology policy decision-making." In: Science and Public Policy, 20 (1), pp. 11-16.

Biegelbauer, P. (1991): Politische Einflußkraft, Arbeits- und Organisationsformen von Politisch-Ökonomischen Interessengruppen in den USA. Institut für Politikwissenschaften. Wien: Universität Wien.

Biegelbauer, P. (2000): 130 Years of Catching Up With the West: A Comparative Perspective on Hungarian Industry, Science and Technology Policy-Making Since Industrialization. Aldershot/Vermont: Ashgate Publishing.

Biegelbauer, P. and S. Borrás (eds.) (2003): Innovation Policies in Europe and the US. The New Agenda. Aldershot, UK: Ashgate Publications.

Bühlmann, M., Merkel, W., Müller, L. and B. Wessels (2008): „Wie lässt sich Demokratie am besten messen? Zum Forumsbeitrag von Thomas Müller und Susanne Pickel." In: Politische Vierteljahresschrift 49(1), pp. 114-22.

Callon, M., Laredo, P. and V. Rabeharisoa (1992): The management and evolution of technological programs and the dynamics of techno-economic networks: The case of AFME. *Research Policy*, 21, p.215-236.

Campbell, D. and T. D. Barth (2009): „Wie können Demokratie und Demokratiequalität gemessen werden? Modelle, Demokratie-Indices und Länderbeispiele im globalen Vergleich.” In: SWS-Rundschau 49(2), pp. 209-33.

Crouch, C. (2004): Post-Democracy. Cambridge: polity.

Dahl, R. A. (1961): *Who governs? Democracy and power in an American city*. . New Haven,: Yale University Press.

Dahl, R. A. (1998): On Democracy. New Haven: Yale University.

Dahl, R. A. (2003): „Polyarchal Democracy.” In: The Democracy Sourcebook. R. Dahl, I. Shapiro and J. A. Cheibub. Cambridge: MIT Press, pp. 48-54.

Dewey, J. (1991 [1927]): The Public and Its Problems. Athens, OH: Swallow Press.

Dicken, P. (1998 (3rd ed.)): Global Shift. London: Paul Chapman Publ.

Felt, U. and B. Wynne (2007): Taking European Knowledge Society seriously. Report of the Expert Group on Science and Governance to the Science, Economy and Society Directorate, Directorate-General for Research, European Commission. Sixth Framework Programme, EC.

Fischer, F. (2006): "Participatory Governance as Deliberative Empowerment: The Cultural Politics of Discursive Space." The American Review of Public Administration 36(1): 19-40.

Fishkin, J. S. (2003): „The Voice of the People.” In: The Democracy Sourcebook. R. Dahl, I. Shapiro and J. A. Cheibub. Cambridge: MIT Press, pp. 25-28.

Fukuyama, F. (1992): The End of History and the Last Man. New York: Free Press.

Goodwin, B. (1997): Using Political Ideas. Chichester, John Wiley & Sons.

Gottweis, H. (1998): Governing Molecules: The Discursive Politics of Genetic Engineering in Europe and in the United States. Cambridge, Mass.: MIT Press.

Gottweis, H. and A. Petersen (2008): Biobanks: Governance in Comparative Perspective. London: Routledge.

Griessler, E. (2007): „‘Policy Learning‘ in der SPÖ: Innerparteiliche Dynamiken bei der Entscheidungsfindung zur Fristenregelung.” In: Österreichische Zeitschrift für Politikwissenschaft 36(3), pp. 267-84.

Griessler, E. and B. Littig (2003): „Participatory Technology Assessment of Xenotransplantation: Experimenting with the Neo Socratic Dialogue." In: Practical Philosophy 6(2), pp. 56-67.

Grin, J. and R. Hoppe (1995): Toward a comparative framework for learning from experiences with interactive technology assessment. In: Industrial & Environmental Crisis Quarterly, 9 (1), pp. 99-120.

Guba, E. G. and Y. S. Lincoln (1981): Effective evaluation. Improving the usefulness of evaluation results through responsive and naturalistic approaches. San Francisco: Jossey-bass Publications.

Hagendijk, R. and A. Irwin (2006): „Public Deliberation and Governance: Engaging with Science and Technology in Contemporary Europe." In: Minerva 44, pp. 167-84.

Hajer, M. A. (1995): *The politics of environmental discourse. Ecological modernisation and the policy process*. Oxford UK: Clarendon Press.

Hajer, M. (1996): „Ecological modernisation as cultural politics." In: Risk, Environment and Modernity: Towards a New Ecology. Lash, S., Szerszynski, B., Wynne, B. (eds), London: Sage, pp. 246-68.

Hajer, M. and H. Wagenaar (eds.) (2003): Deliberative Policy Analysis. Understanding Governance in the Network Society. Cambridge: Cambridge University Press.

Hajer, M. and W. Versteeg (2005): „Performing Governance through networks." In: European Political Science (4), pp. 340-47.

Hamlett, P. W. (*2003*): Technology theory and deliberative *democracy*. Science, Technology, & Human. Values, 28, 112–140.

Hansen, J. (2005): Framing the Public. Three Case studies in public participation in the Governance of Agricultural Biotechnology. European University Institute. Department of Political and Social Studies. Florence: European University Institute.

Hansen, J. (2006): „Operationalising the public in participatory technology assessment: a framework for comparison applied to three cases." In: Science and Public Policy 33(8), pp. 571-84.

Held, D. (2004): „Democratic Accountability and Political Effectivemenss from a Cosmopolitan Perspective." In: Government and Opposition 39(2), pp. 364-91.

Held, D. (2006): Models of Democracy. Stanford: Stanford University Press.

Hirst, P. and G. Thompson (1996): Globalization in Question. Cambridge: Polity Press.

Hoppe, R. and J. Grin (1995): „Technology Assessment for participation: Experiences and lessons." In: Industrial & Environmental Crisis Quarterly, 9 (1), pp. 3-12.

Hrebenar, R. J. and R. K. Scott (1990, 1.ed. 1982): Interest Group Politics in America. Englewood Cliffs: Prentice Hall.

Jessop, B. (1999): „The Changing Governance of Welfare: Recent Trends in its Primary Functions, Scale, and Modes of Coordination." In: Social Policy and Administration 33(4), pp. 348-59.

Joss, S. and S. Bellucci (2002, eds): Participatory Technology Assessment. European Perspectives. Athanaeum Press, Gateshead, Tyne and Wear.

Kohler-Koch, B. (1998): The Evolution and Transformation of European Governance. Working Paper No. 58 in the Political Science Series of the Institute for Advanced Studies. Vienna.

Laird, F. N. (1993): „Participatory Analysis, Democracy, and Technological Decision Making." In: Science, Technology and Human Values 18(3), pp. 341-61.

Lengwiler, M. (2008): „Participatory Approaches in Science and Technology: Historical Origins and Current Practices in Critical Perspective." In: Science, Technology and Human Values 33(2), pp. 186-200.

Lijphart, A. (1999): Patterns of Democracy. Government Forms and Performance in Thirty-Six Countries. New Haven

Lijphart, A. (2008): Thinking about Democracy Power sharing and majority rule in theory and practice. London: Routledge.

Loeber, A. (2004): Practical wisdom in the Risk Society. Methods and practice of interpretive analysis on questions of sustainable development. PhD thesis, University of Amsterdam.

Lord, C. (2008): Some Indicators of the Democratic Performance of the European Union and How they might relate to the RECON Models. RECON online working paper 2008/11. Reconproject. Oslo, pp. 1-29.

Mair, P. (2008): Democracies. Comparative Politics. D. Caramani. Oxford: Oxford University Press, pp. 108-32.

Manin, B. (1997): The Principles of Represantative Government. Cambridge: Cambridge University Press.

Marres, N. (2005): No Issue, No Public: Democratic Deficits after the Displacement of Politics, Doctoral Dissertation, Universiteit van Amsterdam.

Mayer, I. (1997): Debating technologies. A Methodological Contribution to the Design and Evaluation of participatory Policy Analysis. Tilburg: Tilburg University Press.

Mclaverty, P. and D. Halpin (2008): „Deliberative Drift: The Emergence of Deliberation in the Policy Process." In: International Political Science Review 29(2), pp. 197-214.

Mills, C. W. (1956 (1959)): The Power Elite. Oxford: Oxford University Press.

Mouffe, C. (1999): Deliberative Democracy or Agonistic Pluralism. IHS Working Paper, Political Science Series. Vienna: IHS.

Müller, T. and S. Pickel (2007): „Wie lässt sich Demokratie am besten messen? Zur Konzeptqualität von Demokratie-Indizes." In: Politische Vierteljahresschrift 48(3), pp. 511-39.

O'Donnell, G., Cullell, J. V. and O. M. Iazzetta (eds) (2004): The Quality of Democracy. Theory and Applications. Notre Dame, Indiana: University of Notre Dame Press.

O'Neil, J, Carter, C., Keli, K. and W. Kenyon (2008): PATH policy Brief. Representing Diversity in Particpatory Approaches.

Ohmae, K. (1995): Der neue Weltmarkt. Hamburg: Hoffmann und Campe.

Pateman, C. (2003): „Participation and Democratic Theory." In: The Democracy Sourcebook. R. Dahl, I. Shapiro and J. A. Cheibub. Cambridge: MIT Press, pp. 40-47.

Pelinka, A. (1991): Demokratietheorie. Politik-Lexikon. E. Holtmann. München/Wien: Oldenbourg, pp. 108-10.

Pellizzoni, L. (2003): „Uncertainty and Participatory Democracy." In: Environmental Values 12, pp. 195-224.

POST (2001): Open Channels: Public dialogue in science and technology. Summary of POST Report Number 153, pp. 1-2.

Rhodes, R. (1997): Understanding Governance. Policy Networks, Governance, Reflexivity and Accountability. Buckingham: Open University Press.

Rip, A., Misa, T. J. and J. Schot (eds) (1995): Managing Technology in Society: the approach of Constructive Technology Assessment. London and New York: Pinter Publishers.

Roberts, N. (2004): „Public Deliberation in an Age of Direct Citizen Participation." In: The American Review of Public Administration 34(4), pp. 315-53.

Rowe, G. and L. J. Frewer (2000): „Public Participation Methods: A Framework for Evaluation." In: Science, Technology and Human Values 25(1), pp. 3-29.

Rowe, G. and L. J. Frewer (2005): „A Typology of Public Engangement Mechanisms." In: Science, Technology and Human Values 30(2), pp. 251-90.

Sabatier, P. A. and H. C. Jenkins-Smith (eds) (1993): Policy change and learning. An Advocacy Coalition Approach. Boulder etc.: Westview Press.

Sabatier, P. A. (1987): „Knowledge, policy-oriented learning, and policy change." In: Knowledge: Creation, Diffusion, Utilization, 8, pp. 649-92.

Scharpf, F. (1994): „Games real actors could play: Positive and Negative Coordination in Embedded Negotiations." In: Journal of Theoretical Politics 61(1), pp. 27-53.

Schattschneider, E. E. (1960 (1965)): The Semisovereign People: A Realist's View of Democracy in America. New York: Holt, Rinehart, and Winston.

Schön, D. A. (1983): The Reflective Practitioner: How professionals think in action. New York: Basic Books.

Schot, J. and A. Rip (1997): „The past and future of Constructive Technology Assessment." In: Technological Forecasting and Social Change, 54 (2-3), pp. 251-68.

Schumpeter, J. (1942 (1975): Capitalism, Socialism and Democracy. New York: Harper & Row.

Smit, W. A. and E. C. J. van Oost (1999): De wederzijdse beïnvloeding van technologie en maatschappij. Een technology assessment-benadering. Coutinho: Bussum.

Smits, R and J. Leyten (1991): Technology Assessment: waakhond of speurhond? Naar een integral technologiebeleid. Zeist: Kerckebosch Bv.

Sorensen, E. and J. Torfing (2009): „Making Governance Networks effective and democratic through Metagovernance." In: Public Administration 87(2), pp. 234-58.

Torfing, J. (2007): „Introduction: Democratic Network Governance." In: Democratic Network Governance in Europe. M. Marcussen and J. Torfing. Houndmills, UK: Palgrave Macmillan, pp. 1-22.

Truman, D. B. 1956 (1971): The Governmental Process. New York: Knopf.

Fischer, F. and J. Forester (eds) (1993): The Argumentative Turn in Policy Analysis and Planning. Durham: Duke University Press.

Van Eijndhoven, J.C.M. (1997): Technology assessment: product or process? *Technological Forecasting and Social Change*, 54, p.269-86.

Van Est, R. (1999): Winds of Change. A comparative study of the politics of wind energy innovation in California and Denmark. Utrecht: International Books.

Vatter, A. (2009): „Lijphart expanded: Three dimensions of democracy in advanced OECD countries?" In: European Political Science Review 1(1), pp. 125-54.

Wagenaar, H. (2007): „Governance, Complexity, and Democratic Participation: How Citizens and Public Officials Harness the Complexities of Neighborhood Decline." In: The American Review of Public Administration 37(1), pp. 17-50.

Weber, M. (1985): Wirtschaft und Gesellschaft. Tübingen: J.C.B. Mohr.

Webler, T. and S. Tuler (2000): „Fairness and Competence in Citizen Participation: Theoretical Reflections from a Case Study." In: Administration & Society 32(5), pp. 566-95.

Author: Peter Biegelbauer, Anne Loeber

Title: The Challenge of Citizen Participation to Democracy

Reihe Soziologie / Sociological Series 94

Editor: Beate Littig
Associate Editor: Susanne Haslinger

ISSN: 1605-8011

Stumpergasse 56, A-1060 Vienna • ☎ +43 1 59991-0 • Fax +43 1 59991-555 • http://www.ihs.ac.at

ISSN: 1605-8011